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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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04/09/2004

Jochen Schweinbenz

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EXAMINER

PAPE, ZACHARY

ART UNIT

PAPER NUMBER

2835

MAIL DATE

DELIVERY MODE

03/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/821,737	Applicant(s) SCHWEINBENZ ET AL.	
	Examiner Zachary M. Pape	Art Unit 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following detailed action is in response to the correspondence filed 2/4/2008.

Election/Restrictions

1. Newly submitted claim 13 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 13 is directed to a method of manufacturing the invention.

Since applicant's has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 13 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 5, 7-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Clamp et al. (US 6,302,190).

With respect to claim 1, Clamp et al. teaches (In Figs 2, 6, and 7) a housing (Material which houses the electronic components in 20, and the housing 30) for electronic control units (Generally referred to as 20), wherein the housing is situated in a

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motor vehicle, the housing comprising: a bottom section (30) configured to be affixed to a circuit board, and a cooling device (Including 40, 46, and 48) for enabling heat to be dissipated from the housing via a liquid flowing there-through (Column 2, Lines 31-39), wherein the cooling device is integrally formed in the bottom section (As illustrated in Fig 2), and wherein the bottom section is formed as a cooling plate (See Figs 2, 6 and 7), and wherein the cooling device includes at least one one-piece cooling tube (Fig 2, the path including and between elements 46 and 48 through which coolant flows) integrally formed in the bottom section (See Fig 2) and extending substantially across the length of the bottom section (See Fig 2), and wherein the bottom section including the one-piece cooling tube is formed in a single casting operation (even though the claims are limited and defined by the recited process, the determination of patentability of the product is based on the product itself, and does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). In the present case “a single casting operation” is a product by process limitation which is given little patentable weight).

With respect to claim 5, Clamp et al. further teaches sectional members (52) for conducting heat and reinforcing the bottom section (30) are connected (Mechanically and Thermally) to the outside of the cooling tube (As illustrated in Fig 6).

With respect to claim 7, Clamp et al. further teaches that the cooling tube has a round cross-section (As illustrated in Figs 2 and 7, 46 and 48 both have round cross sections).

With respect to claim 8, Clamp et al. further implies in Fig 9 that an inlet of the cooling tube (94) and an outlet of the cooling tube (102) have threaded connectors leading into and out of the bottom section.

With respect to claim 9, Clamp et al. further teaches that the cooling device includes a plurality of one-piece cooling tubes integrally formed in the bottom section (See Present Office Action Fig 1 below where the first cooling channel, and the second cooling channel, form a plurality of one-piece cooling ducts).

With respect to claim 10, Clamp et al. further illustrates that the one-piece cooling tubes are connected by at least one separate cross hole (Running along the left side of the bottom as illustrated in Fig 2 and present office action Fig 1 below).

With respect to claims 11 and 12 the limitations of the claim have been given little patentable weight because the claims contain **only** limitations pertaining to the process of making the product. In the present case, the process by which the product is made does not structurally change the final product made. Since the product in the product-by-process claim is the same as or obvious from a product of the prior art (of Clamp et al.), the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

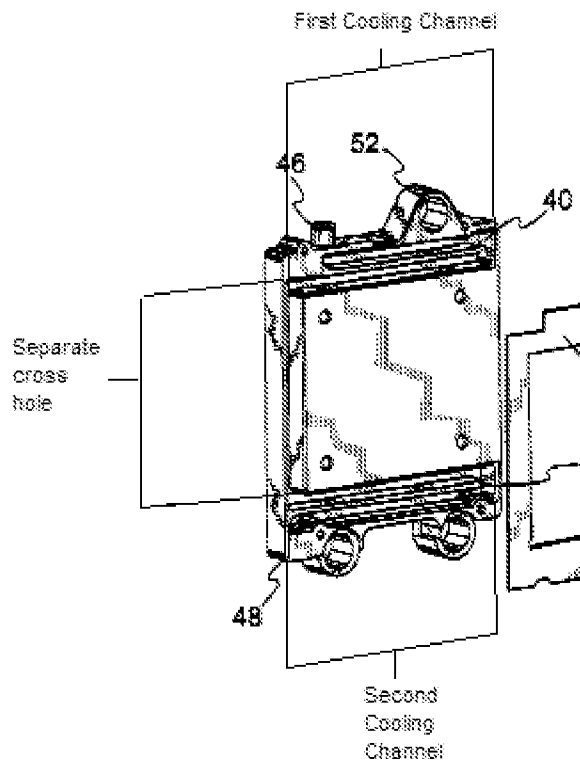


Fig 1

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clamp et al. in view of Watari et al. (US 4,652,970).

With respect to claim 6, Clamp et al. teaches the limitations of claim 1 above but is silent as to a linearly designed cooling duct. Watari et al. teaches the conventionality of having a cooling duct (43) which is linear and passes through the bottom section in a

linear manner (As illustrated in Fig 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Watari et al. with that of Clamp et al. to provide effectively cooling to devices (Column 4, Lines 25-26).

Response to Arguments

4. Applicant's arguments filed 2/4/2008 have been fully considered but they are not persuasive.

With respect to the Applicants' remarks to claim 1 that, "Clamp clearly does not teach or suggest, "one-piece cooling tube integrally formed in the bottom section and extending substantially across the length of the bottom section, and wherein the bottom section includes the one-piece cooling tube is formed in a single casting operation", the Examiner respectfully disagrees. As detailed in the rejection above, Clamp clearly discloses a cooling tube (Fig 2, the path including and between elements 46 and 48 through which coolant flows) which extends substantially across the length of the bottom section (See Fig 2). With respect to the limitation that the tube is formed in a single casting operation, the Examiner has given this limitation little patentable weight since it is clearly a product by process limitation. Even so, the Examiner respectfully notes Col 3, Lines 44-46 which suggests that the device is made in a single casting operation.

With respect to the Applicants' remarks to claim 1 that, "Furthermore, element 46 shown in Fig 2 of Clamp clearly does not extend "substantially across the length of the

bottom section", the Examiner agrees that element 46 does not extend as claimed, however it was never the Examiner's position that only element 46 comprises the claimed cooling tube as suggested, rather that it comprise the path including and between elements 46 and 48 through which coolant flows (see the rejection above).

With respect to the Applicants' remarks to claims 5, and 7-12, the Examiner notes the remarks in paragraph 5 above.

With respect to the Applicants' remarks to claim 6, the Examiner notes the remarks in paragraph 5 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZACHARY M. PAPE whose telephone number is (571)272-2201. The examiner can normally be reached on Mon. - Thur. (7:00am - 5:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash Gandhi can be reached on 571-272-3740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. M. P./
Examiner, Art Unit 2835

/Jayprakash N Gandhi/
Supervisory Patent Examiner, Art Unit 2835